What is Claimed is:

1.   A method of downloading or uploading data via a client-server communications network that includes a server and a plurality of clients, each client having a local cache storing data downloaded via the network, the method comprising:

a requesting client sending a request for data to the server;

the server responding by sending the requested data to the requesting client or referring the requesting client to a proxy server client that holds the requested data in its local cache; and

the requesting client then downloading the requested data from the cache of the proxy server client across the network.

2.   The method of Claim 1, wherein the network comprises the Internet, the clients comprise user terminals running web browsers, and the respective local caches are associated with the browsers on the user terminals.

3.   The method of Claim 1, wherein the server refers the requesting client to the proxy server client if the server is unable to send the requested data to the requesting client within a predetermined target period.

4.   The method of Claim 3, wherein the predetermined target period is variable.

5.   The method of Claim 4, wherein the predetermined target period is varied in accordance with the speed of the connection to the requesting client.

6.   The method of Claim 1, wherein the server refers the requesting client to a plurality of proxy server clients, and the requesting client chooses from that plurality the proxy server client from which it will download the requested data if that data is not provided by the server.

7.   The method of Claim 6, wherein the server sends the requesting client a proxy list containing the respective addresses of the plurality of proxy server clients.

8.   The method of Claim 7, wherein the proxy list also contains the address of the server.

9.   The method of Claim 7, wherein the requesting client assesses the speed of at least one connection to an address in the proxy list.

10.   The method of Claim 9, wherein the requesting client assesses the speed of the connection by pinging the associated address taken from the proxy list.

11.   The method of Claim 9, wherein the requesting client assesses the speeds of connections to more than one address in the proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection.

12.   The method of Claim 9, wherein the requesting client sets a target connection speed and downloads the requested data from the first address in the proxy list to meet that target.

13.   The method of Claim 6, wherein the server maintains a look-up table correlating items of data with the addresses of proxy server clients that are caching that data.

14.   The method of Claim 13, wherein proxy server clients report changes in their cache status to the server.

15. The method of Claim 14, wherein the requesting client reports to the server that it has downloaded and is caching the requested data, and the server associates the address of the requesting client with the requested data in the look-up table so as to use the requesting client as a proxy server client for future requests by other clients for the requested data.

16. The method of Claim 15, wherein the server updates the look-up table by assessing connection speeds to the proxy server client addresses in the table and discarding or demoting the addresses of proxy server clients to which connections are relatively slow.

17. The method of Claim 16, wherein the addresses in the table are pinged and their response times are compared with each other or with a target threshold.

18. The method of Claim 16, wherein the requesting client reports to the server the address of the proxy server client that provided the requested data, and wherein the server assembles an address list of the proxy server clients most commonly accessed to obtain the requested data.

19. The method of Claim 1, wherein if the server fails to respond within a predetermined target period, the requesting client broadcasts the data request over the network to a plurality of other clients or connects to at least one proxy server client whose address is on an auxiliary proxy list held by the requesting client.

20. The method of Claim 19, wherein the auxiliary proxy list contains the respective addresses of a plurality of proxy server clients.

21. The method of Claim 19, wherein the requesting client assesses the speed of at least one connection to an address in the auxiliary proxy list.

22.   The method of Claim 21, wherein the requesting client assesses the speed of the connection by pinging the associated address taken from the auxiliary proxy list.

23.   The method of Claim 21, wherein the requesting client assesses the speeds of connections to more than one address in the auxiliary proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection.

24.   The method of Claim 23, wherein the requesting client sets a target connection speed and downloads the requested data from the first address in the auxiliary proxy list to meet that target.

25.   The method of Claim 20, wherein the data request cascades through levels of a tree or chain client structure to a proxy server client whose address is not on the auxiliary proxy list held by the requesting client.

26.   The method of Claim 25, wherein the requesting client checks that the speed of the connection to the proxy server client meets a target connection speed before downloading the requested data from the proxy server client.

27.   The method of Claim 26, wherein the requesting client assesses the speed of the connection by pinging the proxy server client and comparing the measured connection speed with the target connection speed.

28.   The method of Claim 1, wherein proxy server clients maintain a workload limit and do not serve requests that would exceed that workload limit.

29.   The method of Claim 1, wherein the server monitors the workload of proxy server clients and does not refer the requesting client to proxy server clients whose workload is above a workload limit.

30.   A client-server communications network comprising:

a plurality of clients, each client including a local cache storing data downloaded via the network; and

a server including means for responding to a client that sends a data request to the server, wherein the server includes means for sending the requested data to the requesting client or referring the requesting client to a proxy server client that holds the requested data in its local cache.

31.   The network of Claim 30, wherein the network comprises the Internet, the clients comprise user terminals running web browsers, and the respective local caches are associated with the browsers on the user terminals.

32.   The network of Claim 30, wherein the server is responsive to timeout means to refer the requesting client to the proxy server client if the server is unable to send the requested data to the requesting client within a predetermined target period.

33.   The network of Claim 32, wherein the timeout means includes means for varying the predetermined target period.

34.   The network of Claim 33, wherein the timeout means includes means for sensing the speed of the connection to the requesting client and for varying the predetermined target period in accordance with the sensed connection speed.

35.   The network of Claim 30, wherein the requesting client includes selection means for choosing between a plurality of proxy server clients referred by the server.

36. The network of Claim 35, wherein the selection means selects from a proxy list containing the respective addresses of the plurality of proxy server clients and optionally also containing the address of the server.

37. The network of Claim 36, wherein the selection means comprises bandwidth assessment means for measuring the speed of connection to an address in the proxy list.

38. The network of Claim 37, wherein the bandwidth assessment means includes means for pinging an address taken from the proxy list.

39. The network of Claim 37, wherein the bandwidth assessment means includes means for recording speeds of connections to addresses on the proxy list, means for comparing the recorded speeds, and means for downloading the requested data from the address with the fastest recorded speed.

40. The network of Claim 37, wherein the selection means includes means for comparing a measured connection speed to an address with a target connection speed and downloading the requested data from that address if the measured connection speed meets the target connection speed.

41. The network of Claim 30, wherein the server stores a look-up table correlating items of data with the addresses of proxy server clients that are caching that data.

42. The network of Claim 41, wherein proxy server clients include means for reporting changes in their cache status to the server.

43.   The network of Claim 42, wherein the server includes means for updating the look-up table, the updating means including means for assessing connection speeds to the proxy server client addresses in the table and means for discarding or demoting the addresses of proxy server clients to which connections are relatively slow.

44.   The network of Claim 43, wherein the server includes means for pinging the addresses in the table, means for recording their response times, and means for comparing the recorded response times with each other or with a target threshold.

45.   The network of Claim 43, wherein the requesting client includes means for reporting to the server the address of a proxy server client that provides the requested data, and wherein the server includes means for assembling an address list of the proxy server clients most commonly accessed to obtain the requested data.

46.   The network of Claim 30, wherein the requesting client includes timeout means responsive to failure by the server to respond within a predetermined target period, and means responsive to the timeout means to broadcast a data request over the network to a plurality of other clients or to connect to at least one proxy server client whose address is on an auxiliary proxy list held by the requesting client.

47.   The network of Claim 46, wherein the proxy server clients are in a tree or chain structure comprising a plurality of levels.

48.   The network of Claim 30, wherein the proxy server client includes workload limit means that prevents the proxy server client serving requests that would exceed a workload limit.

49. The network of Claim 30, wherein the server includes workload limit means that prevents referral of the requesting client to proxy server clients whose workload is above a workload limit.

50. A server for a client-server communications network, the server comprising:

means for responding to a client that sends a data request to the server; and

means for sending the requested data to the requesting client or referring the requesting client to a proxy server client that holds the requested data in a local cache of data downloaded via the network.

51. The server of Claim 50, further comprising means responsive to timeout means to refer the requesting client to the proxy server client if the server is unable to send the requested data to the requesting client within a predetermined target period.

52. The server of Claim 51, wherein the timeout means includes means for varying the predetermined target period.

53. The server of Claim 52, wherein the timeout means includes means for sensing the speed of the connection to the requesting client and for varying the predetermined target period in accordance with the sensed connection speed.

54. The server of Claim 50, further comprising a stored look-up table correlating items of data with the addresses of proxy server clients that are caching that data.

55. The server of Claim 54, further comprising means for updating the look-up table, wherein the updating means includes means for assessing connection speeds to the proxy server client addresses in the table, and means for discarding or demoting the addresses of proxy server clients to which connections are relatively slow.

56.   The server of Claim 55, further comprising means for pinging the addresses in the table, means for recording their response times, and means for comparing the recorded response times with each other or with a target threshold.

57.   The server of Claim 50, further comprising means for assembling an address list of proxy server clients most commonly accessed to obtain the requested data.

58.   The server of Claim 50, further comprising workload limit means for preventing referral of the requesting client to proxy server clients whose workload is above a workload limit.

59.   A client terminal for connection to a server, or a browser for such a client terminal, comprising:

    selection means for choosing between a plurality of proxy server clients if the server is unable to respond to a data request from the client within a target period or at all; and

    means for downloading the requested data from a chosen proxy server client.

60.   The terminal or browser of Claim 59, wherein the selection means selects from a proxy list containing the respective addresses of the plurality of proxy server clients and optionally also containing the address of the server.

61.   The terminal or browser of Claim 60, wherein the selection means comprises bandwidth assessment means for measuring the speed of connection to an address in the proxy list.

62.   The terminal or browser of Claim 61, wherein the bandwidth assessment means includes means for pinging an address taken from the proxy list.

63. The terminal or browser of Claim 61, wherein the bandwidth assessment means includes means for recording speeds of connections to addresses on the proxy list, means for comparing the recorded speeds, and means for downloading the requested data from the address with the fastest recorded speed.

64. The terminal or browser of Claim 60, wherein the selection means includes means for comparing a measured connection speed to an address with a target connection speed and downloading the requested data from that address if the measured connection speed meets the target connection speed.

65. The terminal or browser of Claim 60, further comprising means for reporting changes in its cache status to the server.

66. The terminal or browser of Claim 60, further comprising means for reporting to the server the address of a proxy server client that provides requested data.

67. The terminal or browser of Claim 60, further comprising timeout means responsive to failure by the server to respond within a predetermined target period, and means responsive to the timeout means to broadcast a data request over the network to a plurality of other clients or to connect to at least one proxy server client whose address is on an auxiliary proxy list held by the requesting client.

68. The terminal or browser of Claim 60, further comprising workload limit means for preventing the terminal serving requests that would exceed a workload limit.

69. A software plug-in for a client terminal or for a browser loaded on that client terminal and being programmed to adapt the terminal or the browser to perform method steps comprising:

choosing between a plurality of proxy server clients if a server is unable to respond to a data request from the client terminal within a target period or at all; and

downloading the requested data from a chosen proxy server client.